

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-36 (Cancelled).

37 (New). A method of administering an oligonucleotide to a mammal, the method comprising:

administering to the alimentary canal of the mammal a composition comprising an oligonucleotide, said oligonucleotide having at least one internucleoside linkage that is a methylene (methylimino) backbone modification.

38 (New). The method of claim 37, wherein the oligonucleotide has at least one phosphodiester linkage.

39 (New). The method of claim 37, wherein the oligonucleotide has alternating methylene(methylimino) and phosphodiester internucleoside linkages.

40 (New). A method of administering an oligonucleotide to a mammal, the method comprising administering to the alimentary canal of the mammal a composition comprising an oligonucleotide, said oligonucleotide having at least one internucleoside linkage that is a methylene(methylimino) backbone modification, whereby a percent bioavailability of at least about 11.5% is achieved in the mammal relative to intravenous administration.

41 (New). The method of claim 40, wherein the oligonucleotide has at least one phosphodiester linkage.

42 (New). The method of claim 40, wherein the oligonucleotide has alternating methylene(methylimino) and phosphodiester internucleoside linkages.

43 (New). A method of administering an oligonucleotide to a mammal, the method comprising administering to the alimentary canal of the mammal a composition comprising an oligonucleotide in combination with at least a first penetration enhancer, said oligonucleotide having at least one 2'-O-alkyl modification, said first penetration enhancer being a member of the group consisting of a bile salt, a caprate salt and a laurate salt.

44 (New). The method of claim 43, wherein the first penetration enhancer is a bile salt.

45 (New). The method of claim 44, wherein the composition further comprises a second penetration enhancer, which is a caprate salt, a laurate salt, or a combination thereof.

46 (New). The method of claim 44, wherein the second penetration enhancer is a combination of caprate salt and laurate salt.

47 (New). A method of administering an oligonucleotide to a mammal, the method comprising administering to the alimentary canal of the mammal a composition comprising an oligonucleotide in combination with at least a first penetration enhancer, said oligonucleotide having at least one 2'-O-alkyl modification, said first penetration enhancer being a member of the group consisting of a bile salt, a caprate salt and a laurate salt, whereby a percent bioavailability is achieved in the mammal of at least about 17.5 % relative to intravenous bioavailability.

48 (New). The method of claim 47, wherein the percent bioavailability is at least about 31.6%.

49 (New). The method of claim 47, wherein the first penetration enhancer is a bile salt.

50 (New). The method of claim 49, wherein the composition further comprises a second penetration enhancer, which is a caprate salt, a laurate salt, or a combination thereof.

51 (New). The method of claim 49, wherein the second penetration enhancer is a combination of caprate salt and laurate salt.